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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,156	12/12/2003	Bertrand Lion	LOREAL 3.0-002; OA02420/U	3506
530 7590 03/02/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER ROGERS, JAMES WILLIAM	
			ART UNIT	PAPER NUMBER
			1618	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/02/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/735,156	Applicant(s) LION, BERTRAND	
	Examiner James W. Rogers, Ph.D.	Art Unit 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 and 23-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/25/2007 has been entered.

Election/Restrictions

Applicant's election without traverse of group I claims 1-4 and 10-22 in the reply filed on 05/18/2006 is acknowledged. The examiner has withdrawn claims 5-9 and 23-27 for pertaining to non-elected subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically the claim recites the limitation of a methacrylate and methacrylamide by formula, both formulas however cannot be construed as being a methacrylate or methacrylamide because they both lack methyl groups in their formula and from the recitation of the various R groups, methyl is clearly optional. Therefore applicants seem to be claiming an acrylate and an acrylamide, the examiner suggests

amending the claim by deleting the recitation of methacrylate and methacrylamide and replacing with acrylate and acrylamide in order to overcome this rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sebag et al. (US 6,403,106 B1), cited in previous office action dated 10/23/2006.

Sebag discloses cosmetic compositions comprising acrylate copolymers within the MW range specified by applicants with a rigid backbone (can comprise methyl (meth)acrylate) and grafted with macromonomers (including polyethylene/polybutylene copolymer and poly(2-ethylhexyl acrylate)) within the weight % and MW range specified by applicants, the carrier can comprise only cosmetically compatible organic solvents thus meeting the limitation of a non-aqueous non-silicone organic medium. See col 1 lin 9-14, col 2 lin 50-col 4 lin 36 and col 6 lin 53-col 7 lin 11. The Sebag patent does not specially disclose that the carrier or adjuvants listed in the patent are at least 50% of the weight of the dispersion nor does it give the Hanson solubility space for the solvents. It is obvious however that since the graft copolymer of the patent can comprise anywhere between 0.1-50% of the dispersion the carrier and adjuvants would obviously comprise the rest which would be at least 50%. Besides the argument above generally, differences in concentration or temperature will not support the patentability of subject

Art Unit: 1618

matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages."); In re Hoeschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969). Regarding claim 1 the limitation for the Hanson solubility space equal to $17 \text{ (MPA)}^{1/2}$ is obviously met since the organic solvents are cosmetically compatible it would encompass solvents with the above parameter since the applicants dispersion is also to be used in a cosmetic formulation, the burden is shifted to the applicant to show that the solvents listed in the Sebag patent would not have solubility parameters as listed in claim 1. Besides the above the Sebag patent discloses several adjuvants such as fatty oils (including vegetable oil) that would have the above solubility parameter especially when the organic solvent is mixed with the oils or waxes listed. Regarding claim 21 the Sebag patent is silent on the size of the particles of the graft copolymer but it is obvious that if the patent used an organic medium that is non-polar it would form micelles within the specified range listed since the graft copolymers are the same they would aggregate and form particles in the same way and would have the same exact size. Regarding claim 22 the limitation that the solids or dry content is between 4-70 % is obviously met because Sebag teaches the

Art Unit: 1618

concentration of the graft copolymers (considered by examiner to be solid content) is between 0.1-50 percent, within the range specified by applicants. See col 6 lin 45-49.

Claims 1-4 and 10-13,17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mougin et al. (US 6,113,882), cited in previous office action dated 10/23/2006.

Mougin discloses cosmetic compositions comprising acrylate copolymers within the MW range specified by applicants (including methyl (meth)acrylate) and grafted with macromonomers (including linear or branched C1-C20 alkyl acrylate or methacrylate homo- or co-polymers with end groups selected from vinyl and methacryloyl) within the weight % and MW range specified by applicants, the carrier can comprise only cosmetically compatible organic solvents thus meeting the limitation of a non-aqueous non-silicone organic medium. See col 1 lin 7-12, col 2 lin 56-col 4 lin 32 and col 6 lin 49- col 7 lin 13. The Mougin patent does not specially disclose that the carrier or adjuvants listed in the patent are at least 50% of the weight of the dispersion nor does it give the Hanson solubility space for the solvents. It is obvious however that since the graft copolymer of the patent can comprise anywhere between 0.1-50% of the dispersion the carrier and adjuvants would obviously comprise the rest which would be at least 50%. Besides the above generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454,

Art Unit: 1618

456, 105 USPQ 233, 235 (CCPA 1955). The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.”); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969).

Regarding claim 1 the limitation for the Hanson solubility space equal to $17 \text{ (MPa)}^{1/2}$ is met, it is obvious that since the organic solvents are cosmetically compatible it would encompass solvents with the above parameter since the applicants dispersion is also to be used in a cosmetic formulation, the burden is shifted to the applicant to show that the solvents listed in the Mougin patent would not have solubility parameters as listed in claim 1. Besides the above the Mougin patent discloses several adjuvants such as fatty oils (including vegetable oil) that could have the above solubility parameter especially when the organic solvent is mixed with the oils or waxes listed. Regarding claim 21 the Mougin patent is silent on the size of the particles of the graft copolymer but it is obvious that if the patent used an organic medium that is non-polar it would form micelles within the specified range listed since the graft copolymers are the same they would aggregate and form particles in the same way and would have the same exact size. Regarding claim 22 the limitation that the solids or dry content is between 4-70 % is obviously met because Sebag teaches the concentration of the graft copolymers (considered by examiner to be solid content) is between 0.1-50 percent, within the range specified by applicants. See col 6 lin 40-45.

Applicant Arguments/Remarks Made in an Amendment

Applicants arguments filed 01/25/2007 have been fully considered but are not found persuasive.

Seabag and Mougin are disclosed above.

Applicants assert that the amount of carrier and adjuncts within their claimed dispersion of particles is unobvious.

The relevance of this assertion is unclear. As described above it is obvious that since the graft copolymer of the patents above can comprise anywhere between 0.1-50% of the dispersion the carrier and adjuvants would obviously comprise the rest which could be at least 50%. In fact the amount of carrier and adjuvants in the composition could be anywhere from 50-99.9% of the weight of the total composition.

Applicants also assert that Seabag and Mougin teach a copolymer that is soluble or dispersible in water while their claimed invention are dispersible but not soluble in a non-aqueous non-silicone organic medium. Applicants assert the skeleton of the copolymer in the patents above are water soluble which is different than their claimed skeleton of their copolymer which is insoluble in a non-aqueous non-silicone organic medium. Applicants lastly assert that the graft portions of the copolymers in the patents above are water insoluble which is different from than their currently claimed graft portion, which is soluble in the non-aqueous non-silicone organic medium. Therefore the applicants surmise that the copolymer dispersions of their invention are diametrically opposed to those claimed in the cited art.

The relevance of this assertion is unclear. Firstly the patents above only disclosed that the copolymers are soluble or dispersible in **water**, a different solvent system then what is currently claimed by applicants, therefore the applicants are essentially comparing the cited arts copolymers, their skeletons and graft portions solubilities and their own copolymer in two different types of solvents, an argument which is flawed. Applicants arguments would only bear weight if the solvent systems were the same. As noted above water is not the only solvent that can be used, organic solvents such as alcohols and other adjuncts are also disclosed as being useful, the use of water as a solvent is optional. The argument above is not persuasive because the above patents obviously disclose the same type of copolymers as applicants currently claimed invention, therefore they will obviously have the same solubility properties in the same solvent. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).


Conclusion

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

Art Unit: 1618

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Michael G. Hartley', with a stylized flourish at the end.

MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER